

ARGUMENTS/REMARKS

The claims have been amended as set forth above. Claims 1-2, 5, 7, 9-10, 13-14, 17, 19, 21-22, 25-26, 29-30, 33-35, 37-40, 42-43, and 45-47 remain in the application. Claims 1, 13, 21, 29, 35, 39 and 43 are independent claims.

Independent claims 1, 13 and 39 pertain to network-based methods for providing a real-time analysis service notifying users, while their calls are being processed, of minimum cost periods under the calling plans to which they have subscribed for the specific calls they have just placed.

Response to rejections of claim 1

Independent claim 1 is illustrative. As amended, claim 1 now includes the subject matter of former claims 3, 4, 6, 8, 11 and 12, now cancelled. Claim 1 describes a method for providing a network-based service to a calling party during processing of a telephone call initiated by the calling party which includes the steps of (1) storing calling plan information for the calling party in a database in the network, (2) receiving a request for a connection from the calling party which includes originating and terminating addresses, (3) verifying that the calling party is to receive the notification service for the received request, (4) retrieving the stored calling plan information associated with the calling party, (5) determining a minimum cost period (time of day, day of week, plurality of days) for completing the call connection based on the calling plan information for the calling party, (6) while the connection is being established and before completing the connection to the called party, transmitting an audible message from the network to the calling party including the minimum cost period that has just been determined, (7) prompting the calling party to abandon the telephone call after transmitting the minimum cost period message, (8) completing the connection if the telephone call is not abandoned

by the calling party, and (9) deactivating the transmission of the notification message after receiving a deactivation request.

The method of claim 1 thus provides a network-based system which (a) does not require the calling party to use any terminal equipment beyond a simple handset, (b) does not require any signaling between caller and network beyond the caller's identification (e.g., calling telephone number) and called party's identification (e.g., the called telephone number) which are present in any event for billing and call completion purposes, (c) utilizes database storage of calling plan information, which is present in any event for billing purposes, information which will be updated and kept current as a matter of course because it is the information used for billing, (d) can utilize high speed computer facilities present in the network for efficiently and rapidly performing an analysis of retrieved database information for the requested call using the from/to identifications for lookup and analysis, (e) verifies that the call request is to receive the service (e.g., the caller meets certain criteria for the service and no deactivation request is present) and performs the service while the network is establishing the connection and before the connection to the called party is completed, to allow the message to be immediately utilized, (f) can utilize existing voice announcement facilities present in the network to transmit an audible message to the calling party of minimum cost periods, as well as a prompt to abandon the call (which the calling party presumably will do if it is desired to take advantage of a lower cost period), and (g) allows for deactivating the notification message if the network receives a deactivation request. As a result of utilizing these method steps, the network-based service (1) can piggyback on network facilities already present for other purposes and can advantageously be put in place with a software application package, (2) can be provided by the carrier at its own initiative as an added feature for users on a trial or permanent basis for a specific calling plan, and does not require users to take any steps or incur any investment to initiate the service unless the provider so requires, and (3) leaves entirely to the discretion of the calling party the decision to act or not act on the received message based on factors pertinent to the calling party.

The subject matter of claim 1 (incorporating the subject matter of former claims 3, 4, 6, 8, 11 and 12) was rejected under 35 U.S.C. §103(a) as unpatentable over Manicone 5,748,718 (“Manicone”) in view of Lautenschlager 6,104,792 (“Lautenschlager”) further in view of Chavez 6,052,449 (“Chavez”), further in view of Dahm et al 6,301,471 (“Dahm”), further in view of Byers 5,579,417 (“Byers”), further in view of Penzias et al 5,473,630 (“Penzias”).

These six references contain a variety of disclosures of method steps which have been asserted would “be obvious to those of skill in the art” to combine to achieve applicant’s invention. There is, however, no disclosure in the references that all of these individual steps could be separated out from their disclosures and used in combination with other similarly isolated steps from other references to achieve the cohesive network-based method described, for example, in claim 1. It is only with the benefit of hindsight and applicant’s disclosure that one is provided with a path, or a reason, for stitching together the appendages of the prior art to form the cohesive whole that is applicant’s invention, with the advantages it provides. None of the references describes, for example, a network-based method for providing a service to subscribers that can be implemented at the behest of a network operator alone, or one which is so readily adaptable to existing network facilities, or one which is designed to supply informational messages and leave decisions to the calling party on a call-by-call basis.

Manicone discloses a telephone monitoring system that determines information about telephone calls made including the duration of each call and the cost of each call. The monitoring system also allows an administrator to set controls governing the duration and/or cost of each call made. The Manicone patent does not disclose a method of analyzing a calling plan, or a network-based method requiring no more of the user than call setup information to cause the method to perform.

Lautenschlager discloses the use of network facilities in performing a method of informing a caller about the charges that will be incurred for a desired connection in response to a call request. Lautenschlager also discloses a method of informing a caller when an alternative connection path for a call is feasible and providing a caller with the

tariff data for the alternative connection path so that the caller can choose the connection path for the placed call. Lautenschlager requires the subscriber to have a display unit and suggests the use of a network initiated voice message to supply user information which “could for example contain messages about special offers regarding communication services that are presently available” (col. 7, lines 45-50) which appears to be in the nature of advertising—a canned message to tout offerings. Lautenschlager does not disclose or contemplate calling plans, or analyzing calling plan information, or using voice announcements to the calling party to specifically inform the calling party, for a particular call just initiated by the calling party, of minimum cost periods available under the caller’s calling plan. Lautenschlager also does not disclose transmitting messages while the communications connection is being established within the telecommunications network. This conclusion follows because until the user selects one of the alternative connection paths suggested by Lautenschlager, the connection cannot be established because the path is unknown. Thus connection setup must wait for the user to make a decision. In applicant’s invention on the other hand the connection path is known, can be established, and will be ultimately connected unless the calling party elects to abandon the call. Lautenschlager also does not disclose verifying that the originating address of the calling party is to receive the notification service for the received request. The Office Action notes that Lautenschlager requires the user to key in the number “S” in advance of the called number—which means that the service is self-verifying because anyone inserting an “S” can use the service—and this arrangement certainly does not allow the network to verify based on the originating address of the calling party. “Verification” in the Lautenschlager arrangement is in the hands of the user, not the provider, which is not what applicant’s method provides.

Chavez, the new reference cited in the Office Action, discloses a system in which a central office periodically transfers service plan information of different network carriers to be stored in and utilized by computers resident in telephone terminals on consumer premises. The system of Chavez requires each customer be equipped with a customer premises computer, locally provided announcement means, and data storage at each terminal and a data transfer link (such as the ISDN line disclosed) to transfer data

from the central office. The comparison processes among service plans are said to be all performed in the individual telephone terminal computers on the customer premises (col. 3, lines 47 et seq.) and not in the network. It is necessary in Chavez to update each terminal with new information and conduct an analysis of calling patterns and install data for a new service plan to supply information to the user for future actions. As a result of the local analysis, storage and display, the service provider will “automatically change the network carriers used by an individual consumer” and “The information stored in the telephone terminal of the consumer causes that telephone terminal to alert the consumer to special times during which the consumer should make telephone calls” and “the telephone terminal will warn the consumer upon the consumer attempting to place a call if there is a more advantageous time to place the call within some predefined time period.” (Abstract) Chavez requires a redundancy of computer and announcement equipment, one set for each user, limits the benefits of the system to those who invest in a specially equipped terminal, does not send messages while the communications connection is being established (because the user terminal where the analysis take place does not function to establish the network connection until a choice has been made) and does not disclose any of the benefits of a network-based service. Those benefits include availability to all telephone users, address-based lookup, centralized database storage of calling plan information (shared by many users), centralized high-speed computer processing, use of verification, processing and announcement features already present in the network facilities and available for use by advisement application packages, processing that can take place while call connections are established and voice announcements that require the user to provide nothing beyond a standard telephone for receipt..

Chavez, by insisting on concentrating processing activities in terminals on customer premises, and utilizing network facilities only for downloading new service plans, teaches away from the network-based method disclosed by applicant and certainly cannot be said to suggest that it would be desirable to perform any method steps in a network environment. Nothing in either Lautenschlager or Chavez suggests any reason why it would be advantageous to combine any of their separate features to arrive at

applicant's invention, where messages are transmitted while the communications connection is being established within the telecommunications network.

Dahm (applied to former claim 3 relating to verification) discloses a churn reduction and loyalty system for mobile communication devices. This system identifies subscribers who are considered likely candidates for churning. Dahm forwards offers to these identified candidates concerning other call plans that may better meet the needs of the candidate based on the candidate's past cumulative use of the communication device. Dahm does not analyze a current call that is attempting to be connected, and does not verify that a caller is entitled to a network-based service or to have a current call analyzed.

Byers (applied to former claim 8 regarding deactivating the transmission of the notification message after receiving a deactivation request) discloses a telecommunications network including a plurality of local exchanges or switching systems, each local switch supporting at least one customer line accessed by customer premise equipment. The network can be used to provide information regarding the routing of a call. Byers discloses the step of using a numeric code before dialing to allow the subscriber to disable the service and select a desired service. However Byers does not discuss or contemplate a method of evaluating a calling plan, determining when a call can be completed for the lowest cost and notifying the caller if the call can be completed at a lower cost at a different time. Byers does not disclose transmitting the notification message while the communications connection is being established within the telecommunications network and before completing the connection of the calling party to the called party. Nothing in Byers, therefore, suggests its disclosure be combined with other steps to arrive at the method of claim 1.

Penzias (applied to former claim 12 relating to prompting the calling party to abandon the telephone call after transmitting the minimum cost period) discloses updating rate information for use in services that compare rates of different carriers for selecting the lower cost carrier. Penzias discloses the possibility that new rates will be given in advance of the time they take effect (one-half hour in advance is mentioned) and

that waiting for a new rate to take effect could have a cost benefit. "If there would be a benefit, then an announcement is presented to the caller (action block 514) informing him/her of the relevant facts, such as when the rate change will become effective and what the monetary benefit in waiting will be. The caller is prompted to indicate whether the call should be placed now or not (decision block 517). If yes the call is placed (action block 516). If no, the call is disconnected (action block 518)." (col. 6, lines 58-65).

Nothing in Penzias discloses or suggests a network-based notification service to a calling party during processing of a telephone call to determine a minimum cost period based on the calling plan information for the originating address of the caller, involving storing calling plan information in a database in the network, verifying the calling party is to receive the service, retrieving the stored calling plan information for the calling party, and while the communications connection is being established within the telecommunications network and before connecting the connection of the calling party, transmitting an audible notification message including the minimum cost period to the calling party, and prompting the calling party to abandon the telephone call after transmitting the minimum cost period, and deactivating the transmission of the notification message after receiving a deactivation request.

Accordingly, the six references applied in the Office Action against the subject matter of amended claim 1 do not supply a basis for combining their disparate features to achieve the method of claim 1, and do not suggest the resulting combination would have the advantages of that claimed method. For these reasons it is respectfully submitted that claim 1 is patentable and should be allowed.

Response to rejections of dependent claims 2, 5, 7 and 9-10

Claims 2, 5, 7, and 9-10 are dependent on claim 1 and are allowable for the reasons supporting the allowance of claim 1. In addition, claim 2 (further step of prompting for transfer to a customer service center), claims 5 and 7 (further displaying the notification message on a display screen or on a web page) claim 9 (further deactivating the transmission of the notification message after a predetermined period of time) and claim 10 (further providing a plurality of minimum cost periods to the calling

party after the calling party has made a plurality of telephone calls) each provide enhancements to the method for providing a network-based service of claim 1 which extend its utility and advantages. Thus, added customer service is provided by giving customers the option to transfer to a customer service center for more information or help; providing visual displays in addition to the audible message permits the message to be retained for later use (to remember, e.g., when the lower cost periods exist) or for keeping a record or report accessible to the user or others of times when a call is made that could have been completed more cheaply. Similarly, the steps of deactivating after a period of time and providing a plurality of minimum cost periods after the caller has made a predetermined number of calls allows the network-based service to tailor its application to customer usage for greater efficacy and customer service. None of these capabilities of claims 2, 5, 7, and 9-10 for providing an enhanced method for a network-based service to a calling party during processing of a telephone call initiated by the calling party to learn of minimum calling periods under the calling party's calling plan is suggested by the prior art. Dahm, cited against claim 2, discloses a churn reduction and loyalty system for mobile communication devices that does not analyze a current call that is attempting to be connected, and does not verify that a caller is entitled to a network-based service or to have a current call analyzed and thus the mere disclosure of an opportunity to be connected to customer service representative does not suggest the network-based service of claim 2. With respect to claim 5, the Official Action states that Manicone teaches using display, but there appears to be no disclosure of both an audible message and a display as claim 5 now contemplates. With respect to claim 7, Dahm is said to disclose display on a web page, but the online access that provides options to subscribers that is referred to in Dahm appears to be a source of general calling plan information and to be a substitute for contact with a service representative, and is not a second display in addition to an audible message as claim 7 now contemplates, nor is it a display of information of minimum cost periods as required by claim 7. With respect to claim 9, the Office Action cites Mijares, Jr. et al 6,330,311 ("Mijares").

Mijares discloses a routing system for telecommunication units intended to rout telephone communications to low cost carriers or preferred carriers, with the use of an

update timer to update information from carriers during off peak hours so that current carrier rate data will be accurately reflected within a system. It is respectfully submitted that Mijares does not disclose deactivation of the notification message of minimum cost periods after a predetermined period of time, nor the network-based service with this feature of deactivation in addition to deactivation after receiving a deactivation request as claim 9 now contemplates.

With respect to claim 10, the Official Action cites Chavez for disclosure of providing a plurality of minimum cost periods to the calling party after the calling party has made a plurality of telephone calls. Chavez does not disclose providing a plurality of minimum cost periods that reflect a customer's usage determined after the customer makes a plurality of telephone calls. This feature, which allows the network-based service to refine the message according to a customer's usage, does not appear to be present in Chavez.

Claims 2, 5, 7, and 9-10 dependent on claim 1 therefore are allowable for these additional reasons.

Response to rejections of claims 13 and 39

Like claim 1 discussed above, independent claims 13 and 39 pertain to network-based methods for providing a real-time analysis service notifying users, while their calls are being processed, of minimum cost periods under the calling plans to which they have subscribed for the specific calls they have just placed, with verification that calling party is to receive the service, storage and retrieval of calling plan information associated with the originating address of the calling party, notification of minimum cost periods before completing connection of the call, and prompting the calling party to abandon the call after the notification. As amended, the subject matter of claim 13 (incorporating the subject matter of former claims 15, 16, 18 and 20) was rejected under 35 U.S.C. §103(a) as unpatentable over Manicone, in view of Lautenschlager, further in view of Chavez, further in view of Dahm, further in view of Byers. The subject matter of claim 39 (incorporating the subject matter of former claim 41) was rejected under 35 U.S.C.

§103(a) as unpatentable over Manicone, in view of Lautenschlager, further in view of Chavez, further in view of Mijares, further in view of McFarland et al 5,408,526 (“McFarland”).

Except for McFarland, all of these references have been discussed above and the arguments made there apply equally to claims 13 (directed to telephone calls) and 39 (directed to video telephone calls). Accordingly, those arguments are incorporated herein by reference.

McFarland, cited against claim 39, discloses a method of identifying information about a conference call to be placed. This information includes the location of the parties to the call, the start and stop time of the call, and the bandwidth requirements for the call. The method also includes comparing this information to information in a database to identify available network path/routes for the conference, to select the most cost effective means for initiating the conference, and to send information, such as an announcement, to the parties involved in the conference, indicative of the route/path selection. McFarland is relied upon to teach the steps of determining the bandwidth and quality of service needed for a given telephone call. McFarland does not disclose a network-based service for placing a call which involves storing calling plan information in a network database, verifying that the originating address of the calling party is to receive the notification service, notifying the caller of the minimum cost time period for placing the call under the caller's calling plan, and prompting the calling party to abandon the video telephone call after the step of transmitting the message as recited in claim 39.

Accordingly, it is respectfully submitted that the subject matter of independent claims 13 and 39 is not disclosed by the cited prior art, nor does the prior art (aside from the teaching provided by applicant) suggest that their separate and disparate elements could be singled out and advantageously combined to provide the network-based service that is the subject of claims 13 and 39. Claims 13 and 39, it is respectfully submitted, are therefore patentable.

Response to rejection of dependent claims 14, 17, 19 and 40, 42

Claims 14, 17 and 19 are dependent on claim 13 and are allowable for the reasons supporting the allowance of claim 13. Claims 40 and 42 are dependent on claim 39 and are allowable for the reasons supporting the allowance of claim 39. In addition, claims 14 and 40 (prompting the calling party for transfer to a customer service center) and 17, 19 and 42 (displaying the minimum cost period on a display screen or web page) were rejected on the same prior art as dependent claims 2, 5 and 7 discussed above. The arguments made with respect to those dependent claims apply here and are incorporated by reference. Accordingly, it is respectfully requested that dependent claims 14, 17, 19 and 40, 42 are allowable over the cited prior art for the reasons previously stated.

Response to rejection of independent claims 21, 29 and 43

Independent claims 21, 29 and 43 pertain to network-based methods for providing a real-time analysis service notifying users, while their calls are being processed, of the least-cost calling plan for the call they have just placed. In general, independent claim 21 (incorporating the subject matter of former claims 23, 24, 27 and 28) is similar to claim 1, independent claim 29 (incorporating the subject matter of former claims 31, 32) is similar to claim 13 and independent claim 43 (incorporating the subject matter of former claim 44) is similar to claim 39 except that instead of notifying of minimum cost periods, the network-based service provides an analysis that compares the caller's stored calling plan with other plans stored in the network database to provide a notification of a least-cost calling plan for the telephone call the calling party has just placed. The Office Action cites the same prior art and makes the same arguments with respect to claims 21, 29 and 43 as it did with respect to claims 1, 13 and 39. Applicant's responses to that prior art, and applicant's arguments, all as set forth above with respect to claims 1, 13 and 39, apply equally to claims 21, 29 and 43 and are incorporated herein by reference. For all of the reasons stated above, it is respectfully submitted that claims 21, 29 and 43 are allowable over the prior art cited in the Office Action.

Response to rejection of dependent claims 22, 25, 26, 30, 33, 34, 45, 46, 47

Claims 22, 25 and 26 are dependent on claim 21 and are allowable for the reasons supporting the allowance of claim 21. Claims 30, 33, 34 are dependent on claim 29 and are allowable for the reasons supporting the allowance of claim 29. Claims 45, 46 and 47 are dependent on claim 43 and are allowable for the reasons supporting the allowance of claim 43. In addition, dependent claims 22, 30, 45 (prompting the calling party for transfer to a service center), and 25, 26, 33, 34, and 46 (displaying the notification on a display screen or web page) were rejected on the same prior art as dependent claims 2, 5 and 7 discussed above. The arguments made with respect to those dependent claims apply here and are incorporated by reference. Accordingly, it is respectfully requested that dependent claims 22, 30, 45 and 25, 26, 33, 34, and 46 are allowable over the cited prior art for the reasons previously stated. Dependent claim 47 (step of sending includes the step of announcing the message) modifies claim 43 directed to making video telephone calls. None of the collection of patents cited to reject claim 47 (Manicone, Lautenschlager, Chavez, Mijares, McFarland) discloses a network-based service for video telephone calls that provides an analysis that compares the caller's stored calling plan with other plans stored in the network database to provide a notification of a least-cost calling plan for the telephone call the calling party has just placed with verification that the caller is to receive the service and providing a prompt to the calling party to abandon the video telephone call after the notification, with sending including announcing the message. Accordingly, claim 47 should be allowable for these independent grounds.

Response to rejection of claims 35, 37 and 38

Independent claim 35 pertains to a packetized audio telephony system and a packetized network-based method for providing a service notifying a calling party, while the calling party's call request is being processed, of a cost value for a quality of service requested in the call request to be made over the packetized audio telephony system. The packetized network stores in a database information on a calling plan associated with the calling party, receives a request for a communications connection, verifies that the calling party is to receive the service, retrieves calling plan information from the database

associated with the calling party's originating address, makes a determination of the cost value for completing the requested communications connection based on the retrieved calling plan information, and transmits a notification to the calling party while the communications connection is being established within the telecommunications network. Thus, like the claims described above, claim 35 describes a network-based method for notifying a calling party about the effect of calling plan information for the calling party on the call request the calling party is currently making, providing a notification of information determined by the network to be of relevance to the calling party's call, and allowing the calling party to act on the information according to factors deemed by the calling party to be important.

The rejection with respect to claims 35-38 cited as prior art the patents to Manicone, Lautenschlager, Chavez and Mijares. The comments and arguments above with respect to Manicone, Lautenschlager and Chavez apply with equal force to independent claim 35 and are incorporated by reference. The Office Action makes additional comments with respect to Mijares and claim 35. It is said that Mijares "further discloses selecting least cost call carrier based on quality of service (col. 5 line 55 – col. 6 line 60)." However, it appears from the cited passage in Mijares that the selection is made on a fixed time of day basis: "As an example, a business person operating a home office may want to utilize a 'high quality' telecommunications carrier during business hours in order to avoid busy signals and in order to guarantee a clear, telecommunications channel (with no cross-talk) for all 'business' telecommunications sessions. However, during off peak or non-business hours (generally 6 PM through 8 AM and all day Saturday and all day Sunday), the home office business person may want programmable unit 14 to select the least expensive low cost call carrier in order to reduce his or her telephone bill." Mijares thus is again low cost carrier selector but with an override during business hours to provide service from a carrier that provides higher quality service. Mijares does not disclose a network-based service that on a call-by-call basis looks up stored calling plan information and delivers a message, while the call is being completed, which informs the calling party of information pertaining to the very call the calling party is attempting to put through. Accordingly, Mijares does not supply any teaching that

would direct one how to take disparate elements from Manicone, Lautenschlager and Chavez and assemble them in a combination that would provide the advantages of the network-based service described in claim 35.

Dependent claims 37 and 38 should be allowable for the reasons supporting allowance of claim 35. In addition, claim 37 (audibly announcing the notification message) and claim 38 (displaying the notification message on a screen) supply aspects previously discussed with respect to claim 47 and claims such as 5, 17, 25 and 33. For the reasons stated with respect to those claims, incorporated herein by reference, claims 37 and 38 have independent reasons for allowance.

The foregoing amendments require no additional claim fee.

For the foregoing reasons, it is respectfully submitted that claims 1-2, 5, 7, 9-10, 13-14, 17, 19, 21-22, 25-26, 29-30, 33-35, 37-40, 42-43, and 45-47 are now allowable, and reconsideration and allowance of the application is respectfully requested. If there are any outstanding issues, the Examiner is invited to contact applicant's attorney at 203-838-8037.

An associate power of attorney to the undersigned is being filed herewith,
together with a notification of change of correspondence address.

Respectfully,
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